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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,210	10/28/2003	Pankaj Mehra	200309399-1	4503

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INTELLECTUAL PROPERTY ADMINISTRATION		
FORT COLLINS, CO 80527-2400		

EXAMINER	
SEYE, ABDOU K	

ART UNIT	PAPER NUMBER
2194	

MAIL DATE	DELIVERY MODE
07/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/695,210	Applicant(s) MEHRA ET AL.	
	Examiner Abdou Karim Seye	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.


 WILLIAM THOMSON
 SUPERVISORY PATENT EXAMINER

DETAILED ACTION

1. This is the initial office action based on the application filed on October 28, 2003.

Claims 1-32 are currently pending and have been considered below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 11-15, 21-22 and 25-32 are rejected under 35 U.S.C. 102(b) as being anticipated by **Hardwick, et al. (US 5550816)**.

Claims 1, 11 and 21 Hardwick teaches an electronic system, product and method, comprising: a processor (FIG.2: 108); a network interface controller including a hardware port (FIG. 2: 166); a virtual switch (FIG.2: 152) comprising software executed by said processor and including a plurality of virtual ports (FIG. 2:160,162), said virtual ports adapted to provide communication between an application running on said processor and said network interface controller; and an application programming interface ("API") running on said processor and usable by said application to interface with said virtual switch (FIG. 2: 164, col. 23, lines 60-65; col. 24, lines 9-15).

Claim 2, Hardwick teaches,

wherein said API includes code that permits an application to register itself with the virtual switch to permit a resource to be assigned to said application (col. 38, lines 4-10; applications registering).

Claim 3, Hardwick teaches,

wherein said API includes code that permits an application to register itself with the virtual switch to permit a unique identifier to be assigned to said application (col. 38, lines 4-10; applications registering; FIG. 5 : 122; col. 23, lines 40-47; col. 37, lines 50-63; protocol registration).

Claim 4, Hardwick teaches,

wherein said API further includes code to deregister said application from virtual switch to release a resource that has been assigned for use by said application (col. 37, lines 50-63; protocol deregistration).

Claim 5, Hardwick teaches,

wherein said API includes code to permit said application to transmit data through said virtual switch to another application (FIG. 2 ,col. 37, lines 50-63).

As per claims 12-15, 22 and 25-32, they are rejected for the same reasons as the claims above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103 (a) which forms the basis for all obvious rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-10, 16-20 and 23-24, are rejected under 35 U.S.C. 103 (a) as being unpatentable over **Hardwick, et al. (US 5550816)** in view of **Carollo et al** **(2004/0267866)**

Claims 6-10, Hardwick teaches, an electronic system, product and method as in claim 1, 11 and 22 above but, he does not explicitly disclose, wherein said API includes code to cause said virtual switch to open a handle and to post a receive buffer on said handle; wherein said code that causes the virtual switch to open a handle and post a receive also includes code to transition said handle between a first state and a second state, said first state indicates that the switch has not received data to be provided to said application and said second state indicates that the virtual switch has received

data to be provided to said application; wherein said API also includes code for closing said handle ; wherein said API includes to permit the application to inform the virtual switch that the application is ready to receive data. However, in the same field of endeavor Carollo discloses communication of two applications using a virtual switch; and virtual switch manager which manage data placed into an input buffer; and signals sent to the virtual switch manager that data is available for the virtual switch and ready to be received by an other application; and I/O interrupt signals (FIG. 6, paragraph 38). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Hardwick's invention with Carollo's invention to have a virtual switch with a handle that would manage data in buffer transferred to a receiving application in order to provide an improved technique for IP communication between applications. One would have been motivated to use virtual switch for communication among applications in order to provide address resolution protocol (Carollo ; paragraph 20). Therefore to ensure that valid address are provided for improving communication.

As per claims 16-20, 23-24, they are rejected for the same reasons as the claims above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

Watson et al (20030051048) discloses system and method for router virtual networking.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exr. Abdou Seye whose telephone number is (571) 270-1062. The examiner can normally be reached Monday through Friday from 7:30 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, contact the examiner's supervisor, William Thomson at (571) 272-3718. The fax phone number for formal or official faxes to Technology Center 3600 is (571) 273-8300. Draft or informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 273-6722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-3600.

AKS
June, 21 2007


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER